D-Link

DSB-H4 4-port USB Hub User's Manual

Rev. 01 (Oct. 2000)

TABLE OF CONTENTS

Introduction	1
Technology Overview	1
About D-Link DSB-H4 – Your Unlimited USB Hub	1
Features	2
Specification	2
Box Includes	3
Hardware Installation	3
Power Mode Setting	4
Application Diagram	4

Introduction

Welcome to the Universal Serial Bus (USB) HUB, an easy plug and play external simple device that allowed your computer to connect to USB interfaced monitors, printers, digital speakers, modems, digital camera, joystick or multimedia equipment.

Technology Overview

USB stands for Universal Serial Bus. It is a standard that has been adopted by leading manufactures within the computer industry to define a new type of peripheral connection scheme. It is superior to conventional serial and parallel ports for the following reasons:

- Easier-- Windows 98 or Windows 2000 will automatically recognize devices when you plug them in.
- ØØ Quicker-- You won't have to reboot during installation.
- Faster—Top USB data speed is around 100 times faster than a serial connection.
- Greater Expandability—Using USB hubs you can connect up to 127 devices to your computer.
- Me Hot Swappable—Just plug and go!

About D-Link DSB-H4 – Your Unlimited USB Hub

The DSB-H4 USB Hub is a 4 ports device to bridge the USB interfaced peripherals to your desktop computers or notebook computers. The DSB-H4 USB Hub complies with USB specification Ver.1.1. It offers you the flexibility of two data rates. The 12Mbps for devices that require increasing bandwidth and 1.5Mbps for low-speed device like game pads and joysticks. Every single one port of the hub allows to "daisychain" multi devices together.

Features

- **USB** 1.1 specification compatibility
- MM Plug and play with USB devices
- Bus fault detection and recovery

- All Downstream Ports support full-speed and low-speed operations
- Reset by Upstream attachment or programmable reconfigure.
- Downstream port LEDs: Indicating Power and Active on-off.
- Self-powered mode: Shutdown system power no need to disconnect the power adaptor power consumption only 3mA for Red power LED.
- Supports Self-Powered mode and Bus-powered mode, indicate by power LED.
- ∠ Low voltage drop:
 - 1. Self-powered mode: 300mV/2000mA, 76mV/500mA, 9mV/600mA (indicated by Red power LED)
 - 2. Bus-powered mode: 140mV/500mA, 14mV/55mA (indicated by Green power LED)

Specification

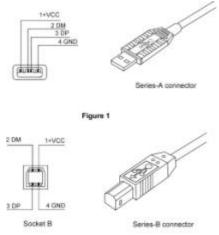
Power Consumption		3 mA per LED
		40 mA for HUB control circuit
Connector	Upstream	1 USB Series B Receptacle
	Downstream	4 USB Series A Receptacle
LED	Power	1 Bus-power (Green LED)
		1 Self-power (Red LED)
	Port Status	4 Port Active Status (Green
		LED)
Weight		100g
Dimension (L x W x H)		67mm(L)x125mm(W)x23mm(H)

Box Includes

- 1-DSB-H4 USB HUB
- 1-USB Cable
- 1-Power Adapter
- 1-User's Manual

Hardware Installation

- First of all, please insert the plug of the power adapter into the power jack of DSB-H4
- II. Connect the series-A connector (please refer to the Figure -1) of the USB cable into the downstream port of PC USB host controller or one downstream port of the upper level (parent) hub.
- III. Connect the series-B connector (please refer to the Figure -2) of USB cable into the upstream port of DSB-H4, the USB hub.
- IV. Connect the series-A connector of USB device, such as USB mouse, USB keyboard and so on, into any one of the downstream port of DSB-H4



Power Mod

Figure 2

There are two power modes for DSB-H4, one is the Self-powered mode and the other is Bus-powered mode. For Self-powered mode DSB-H4 provides all the downstream ports with each port DC +5V, 500mA(max.) power supply. For the Bus-powered mode, DSB-H4 only provides all four downstream ports with DC +5V, 500mA in total. In self-powered mode please make sure that the power adapter is well installed and the plug of Power Adapter is inserted into the Power Jack of the DSB-H4. The powered mode is auto selected while you insert (or remove) the plug of the power adapter into (or from) the power jack of DSB-H4.

Application Diagram

